# FOUR YEAR UNDERGRADUATE PROGRAM (NEP-2020)

# Program: Bachelor in Science (2024 -28) DISCIPLINE – BIOCHEMISTRY

	Session – 202	24 -25		
<u> </u>	DSC -01 to 08		DSE -01 to 12	
Code	Title	Code	Title	
BCSC -017	Introductory Biochemistry and Biomolecules	BCSE -01T		
BCSC -011	Introductory Biochemistry and Biomolecules	BCSE -01P	Clinical Biochemistry	
BCSC -027	Bioanalytical Techniques	BCSE -02T	Biology of Infectious Diseases	
BCSC -021	Bioanalytical Techniques	BCSE -02P	Biology of Infectious Diseases	
BCSC -037	Enzymology	BCSE -03T	Biotechnology	
BCSC -03F	Enzymology	BCSE -03P	Biotechnology	
BCSC -04T	Intermediary Metabolism	BCSE -04T	Plant Biochemistry	
BCSC -04P	Intermediary Metabolism	BCSE -04P	Plant Biochemistry	
BCSC -05T	Gene replication, expression and regulation	BCSE -05T	Human Physiology	
BCSC -05P	Gene replication, expression and regulation	BCSE -05P	Human Physiology	
BCSC -06T		BCSE -06T	Cell Biology	
BCSC -06P	Biochemistry and Function of Hormones	BCSE -06P	Cell Biology	
BCSC -07T	Immunology	BCSE -07T	Microbial Biochemistry	
BCSC -07P	Immunology	BCSE -07P	Microbial Biochemistry	
BCSC -08T	Nutraceutical Biochemistry and Functional Foods	BCSE -08T	Nutritional and Environmental Biochemistry	
BCSC -08P	Nutraceutical Biochemistry and Functional Foods	BCSE -08P	Nutritional and Environmental Biochemistry	
		BCSE -09T	Bioinformatics	
		BCSE -09P	Bioinformatics	
		BCSE -10T	Industrial Biochemistry	
		BCSE -10P	Industrial Biochemistry	
		BCSE -11T	Entrepreneurship Development	
		BCSE -11P	Entrepreneurship Development	
		BCSE -12T	Research Methodology	
		BCSE -12P	Research Methodology	
	GE -01 & 02		VAC	
BCGE -01T	Introductory Biochemistry and Biomolecules	BCVAC-01	Ethno medicine in Chhattisgarh	
BCGE -01P	Introductory Biochemistry and Biomolecules		SEC	
BCGE -02T	Bioanalytical Techniques	BCSEC-01	Biostatistics	
BCGE -02P	Bioanalytical Techniques			

Name and Signature of Convener & Members of CBoS:

Dr. Mrigendra Kumaz Wwined

Raprovatorive H. 1E

## **Programme Educational Objectives:**

- PEO 1: The graduating student shall become a professional assistant in the area of biochemistry.
- PEO 2: The graduating student shall become a researcher in the field of biochemistry.
- PEO 3: The graduating student will become an entrepreneur or a consultant or a freelancer in the area of biochemistry.

### **Program Outcome:**

On successful completion of this program the graduates shall have:

iccessjui	cessful completion of this program the graduates shall have:		
PO1.	<b>Knowledge:</b> A knowledge of contemporary issues related to biochemistry.		
	Ability to demonstrate the fundamental knowledge of molecules of life, molecular		
	techniques, toxicology in the area of biochemistry.		
PO2.	Critical Thinking and Reasoning: Ability to think critically and apply the same to		
	update scientific knowledge.		
PO3.	Problem Solving: Ability to identify, formulate and solve professional problems in the		
	area of biochemistry, experimental skill and critical thinking, students will be capable of		
	addressing intricate societal and industrial challenges.		
PO4.	Advanced Analytical and Computational Skills: Ability to design experiment and		
т т	interpret the results. An ability to design a system, or process to meet desired need		
	within realistic constraints		
PO5.	Effective Communication: An ability to communicate effectively in scientific		
	reasoning and data analysis in both written and oral forms.		
PO6.	Social/ Interdisciplinary Interaction: Ability to function in a multidisciplinary team.		
PO7.	Self-directed and Life-long Learning: A recognition of the needed for and an ability		
	to engage in lifelong learning in the area of biochemistry.		
PO8.	Effective Citizenship: Leadership and Innovation: An ability to use the techniques,		
1 =	skills and modern professional tools necessary for professional practice and for		
	research.		
PO9.	Ethics: An understanding of professional and ethical responsibility in the area of		
	biochemistry.		
PO10.	Further Education or Employment and Global Perspective: The broad education		
	necessary to understand the impact of solutions in a global, economic, environmental		
	and societal context.		

### **Program Specific Objectives:**

PSO1.	Students shall be able to identify, formulate and solve the problems of biological metabolisms, protein biochemistry and molecular biology.		
PSO2.	Students shall be able to conduct the experiments in the field of medicine, toxicology and		
	immunology as well as to analyses and interpret the results.		
PSO3.	Students shall be able to use the biochemical techniques, bioinformatics tools, biostatistics,		
	skills and modern pathological tools necessary for professional practice and for research.		

Name and Signature of Convener & Members of CBoS: